

In the Claims:

1. (currently amended) A biopsy device comprising:

a tissue piercing element having a conductive tip electrode;

a hollow sleeve adapted to fit over and receive the tissue piercing element therein, the sleeve comprising an open proximal end, a distal end, a sidewall extending between the proximal end and the distal end, and a tissue receiving opening disposed intermediate the proximal end and the distal end, wherein the tissue receiving opening is formed laterally in the sidewall, and the sleeve comprising a connector for releasably attaching the sleeve to a biopsy device comprising the tissue piercing element;

at least two electrodes disposed on the sleeve, wherein the at least two electrodes are each adapted for providing coagulation, and such that at least a portion of each electrode is positioned proximally of a distal most portion of the tissue receiving opening, and wherein at least a portion of each electrode is positioned distally of a proximal most portion of the tissue receiving opening; and

wherein the tip electrode is disposed distal of and spaced axially from the at least two electrodes disposed on the sleeve when the tissue piercing element is received in the hollow sleeve, and wherein the tip electrode extends through the distal end of the sleeve when the tissue piercing element is received in the hollow sleeve.

2. (canceled)
3. (canceled)
4. (cancelled)

5. (original) The biopsy device of Claim 1 comprising first and second electrodes associated with the edges of the tissue receiving opening.

6. (canceled) .

7. (previously amended) The device of Claim 1 wherein each of the at least two electrodes is disposed on an outer surface of the sleeve, and wherein each of the at least two electrodes has an outwardly facing electrode surface with a length dimension of between about 20 mm and about 40 mm and a width dimension of between about 3 mm and about 8 mm.

8. through 20. (previously canceled)

21. (currently amended) A biopsy device comprising:

a hollow sleeve comprising a proximal end, a distal end, a unitary sidewall extending from the distal end to the proximal end, and a lateral opening formed through a portion the unitary sidewall, wherein the lateral opening is configured to receive tissue, wherein the sleeve is configured to axially receive a portion of a biopsy probe instrument, and the sleeve comprising a connector for releasably attaching the sleeve to the biopsy probe instrument;

at least two ~~one~~ electrodes disposed on an outer surface of the sleeve, wherein at least a portion of each ~~the~~ electrode is disposed proximally of a distal most portion of the lateral opening, and wherein the two electrodes each extend circumferentially about opposed portions of the circumference of the sleeve; and

a conductive tip electrode slidably received within the hollow sleeve.

22. (previously presented) The biopsy device of Claim 21 wherein the lateral opening is located proximal of the distal end of the sleeve, wherein a portion of the sleeve separates the lateral opening from the distal end of the sleeve.

23. (previously presented) The biopsy device of Claim 21 wherein a portion of the sidewall extends unitarily from the proximal end of the sleeve to the distal end of the sleeve.

24. (previously presented) The biopsy device of Claim 21 further comprising a connector operable to selectively couple the sleeve with the biopsy probe instrument.

25. (previously amended) The biopsy device of Claim 21 wherein the sleeve has an open distal end, wherein the sleeve is configured to axially receive the biopsy probe instrument and the biopsy probe instrument having the conductive tip electrode for penetrating tissue, and wherein the sleeve is configured such that the conductive tip electrode of the biopsy probe instrument extends distally from the open distal end of the sleeve when the sleeve is disposed axially over the biopsy probe instrument.

26. (previously amended) The biopsy device of Claim 25 wherein the biopsy probe instrument has a tissue receiving window, wherein the sleeve is configured such that the lateral opening of the sleeve permits communication of tissue through the lateral opening of the sleeve and through the tissue receiving window of the biopsy probe instrument when the sleeve is coupled with the biopsy probe instrument.

27. (previously presented) The biopsy device of Claim 21 wherein the biopsy probe instrument is configured to communicate electrical signals to the electrodes when the sleeve is coupled with the biopsy probe instrument.

28. (previously presented) The biopsy device of Claim 21 wherein the electrodes are configured to receive communication of electrical signals from a power source independent of the biopsy probe instrument.

29. (previously amended) The biopsy device of Claim 21 comprising first and second electrodes positioned along opposite sides of the lateral opening.

30. (previously presented) The biopsy device of Claim 21 wherein the one or more electrodes comprises an annular electrode positioned at the distal end of the sleeve.

31. (previously presented) The biopsy device of Claim 21 wherein the one or more electrodes comprises a pair of electrodes separated by an electrode gap.

32. (previously presented) The biopsy device of Claim 21 wherein the distal end of the sleeve is open.

33. (Previously presented). The biopsy device of Claim 21 having two electrodes, each electrode extending lengthwise in a direction parallel to the longitudinal axis of the sleeve, and at least a portion of each electrode disposed proximally of a distal most portion of the lateral opening.

34. (cancelled)